

- (21) Application No. 40681/73 (22) Filed 29 Aug. 1973  
 (31) Convention Application No. 2 242 697 (32) Filed 30 Aug. 1972 in  
 (33) Germany (DT)  
 (44) Complete Specification published 16 April 1975  
 (54) INT. CL.: A63B 23/02  
 (52) Index at acceptance  
 A6M 8F 8X



## (54) EXERCISING, SPORT, AND PLAY APPARATUS

(71) I, CARL ULBRICHT, of 12, Hermann Oberth-Strasse, 8012 Putzbrunn, (formerly of 16 Pauldorffer Strasse 8 München 90) Federal Republic of Germany, a citizen of the Federal Republic of Germany, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to an exercising, sport, and play apparatus which serves both to achieve fitness and to satisfy the desire of the human to play.

A play apparatus in the form of a ring is already known, which is kept in rotary movement by rhythmical movements of the user's body with the inside of the ring rolling on the body. This ring moves essentially in the region of the hips, so that the body movements necessary for moving the ring on the basis of centrifugal force are limited to certain parts of the body and in addition require great skill.

The aim of the invention is to provide an exercising, sport, and play apparatus which is suitable for the versatile exercising of practically all parts of the body and which requires no particular skill.

To this end, the present invention consists in an exercising, sport, and play apparatus, comprising an endless ring which is adapted to be supported on the human body or parts thereof and has extending around it an endless guide in which one end of a rope is guided to the other end of which is fastened a weight which can be caused to perform rotary movements by rhythmical movement of the ring. This apparatus has versatile utilisability and can therefore be used in the field of movement therapy for body, arm and leg gymnastics. With this apparatus the rhythmical movement of the body or of the corres-

[Price 33p]

ponding parts of the body to which the ring is attached subjects the weight to the action of centrifugal force and guides it in an orbiting movement in relation to the ring.

The weight preferably consists of a sphere or ball the size and mass of which is selected to suit the physique of the intended user.

On its outer side the ring may have a T-shaped or a substantially C-section rail, or the ring may itself consist of a T-section rail or of a substantially C-section rail.

The rope is preferably guided by means of a sliding element fitting the rail. The sliding element runs on the rail similarly to a trolley on a crane or similarly to a runner on a curtain rail. The sliding element naturally need not itself slide in the rail, but may be in the form of a guide body provided with rollers rolling on the rail of the ring.

Advantageously the ring is provided with handles on diametrically opposite sides on the inside, whereby the possible uses of the apparatus are substantially increased, since for example the ring can be held with both hands and moved above the head, whereby posture defects can be remedied in a graceful manner.

Furthermore, the handles may be provided with hooks, eyes, or notches for the fastening of rubber bands which hold the ring on the body. Since the rubber bands can not only be stretched parallel to one another between the ends of the handles but can also be stretched crosswise, great adjustability is achieved so that this apparatus can be adapted to different waist sizes.

In order that the invention may be more readily understood, reference is made to the accompanying drawings which illustrate diagrammatically and by way of example embodiments thereof, and in which:—

Figure 1 is an elevation of the apparatus of the invention;

Figure 2 is a section on an enlarged scale in the region of the guide rail;

5 Figure 3 shows a modified construction of guide rail; and

Figures 4 to 6 show examples of utilisation of the apparatus according to the invention.

10 As can be seen in Figure 1, the apparatus consists of a ring 1 having an endless guide extending around its outer side in the form of a rail 2 on which by means of a sliding element 3 a weight in the form of a ball 4 can be kept in rotating movements, the ball 4 being joined to the sliding element 3 by a rope 5.

15 Figure 2 shows a section through the ring shown in Figure 1 from which it can be seen that the ring 1 consists of a flat hoop 6 on which the rail 2 is formed as a T-section rail. The sliding element 3 consists of a stirrup-shaped bow 7 the ends of which are directed inwards and carry rollers which engage behind the flange 9 of the T-section rail. The rollers 8 may either be fixed or rotatable.

20 In the modified arrangement according to Figure 3 the ring consists of a substantially C-section rail 10 in which engages an eye-shaped sliding element 11 having outwardly bent ends carrying fixed or rotatable rollers 12.

25 On the inside of the ring 1 two handles 13 are disposed at diametrically opposite positions the handles having inwardly projecting ends 14 on which rubber bands 15 can be fastened for the purpose of supporting the ring on the body. Alternatively, the handles may be provided with hooks (not shown) in any desired positions for attachment of the rubber bands.

30 Figure 4 to 6 show various possible uses of the apparatus of the invention, Figure 4 showing the ring placed around the hips, while in Figure 5 it is held above the head by both hands with the aid of the handles 13. In the application shown in Figure 6 the user holds the ring by one hand on a handle while the elbow is supported on the opposite handle.

35 From the illustrations in Figures 4 to 6 it can be seen that in a preferred embodiment the diameter of the ring is such that it corresponds as a rough ap-

proximation to the length of a forearm and thus in most cases can be slipped loosely over the hips.

#### WHAT I CLAIM IS:—

1. An exercising, sport, and play apparatus, comprising an endless ring which is adapted to be supported on the human body or parts thereof and has extending around it an endless guide in which one end of a rope is guided to the other end of which is fastened a weight which can be caused to perform rotary movements by rhythmical movement of the ring.

2. An apparatus as claimed in Claim 1, wherein the weight consists of a sphere or ball.

3. An apparatus as claimed in Claim 1 or 2, wherein the ring is provided on its outer side with a T-section rail.

4. An apparatus as claimed in Claim 1 or 2, wherein the ring is provided on its outer side with a substantially C-section rail.

5. An apparatus as claimed in Claim 1 or 2, wherein the ring consists of a T-section rail.

6. An apparatus as claimed in Claim 1 or 2, wherein the ring consists of a substantially C-section rail.

7. An apparatus as claimed in any one of the preceding claims, wherein the rope is guided by means of a sliding element which orbits on the rail and which engages the latter.

8. An apparatus as claimed in any one of the preceding Claims, wherein the ring is provided on its inside with handles situated on diametrically opposite sides.

9. An apparatus as claimed in Claim 8, wherein the handles are provided with hooks, eyes, or notches for the fastening of rubber bands which hold the ring to the body.

10. An exercising, sport, and play apparatus substantially as hereinbefore described and as shown in the accompanying drawings.

VENNER, SHIPLEY & CO.,  
Chartered Patent Agents,  
Rugby Chambers,  
2 Rugby Street,  
London, WC1N 3QU.  
Agents for the Applicants.

1,390,477  
2 SHEETS

COMPLETE SPECIFICATION

This drawing is a reproduction of  
the Original on a reduced scale.  
SHEET 1

BEST AVAILABLE COPY

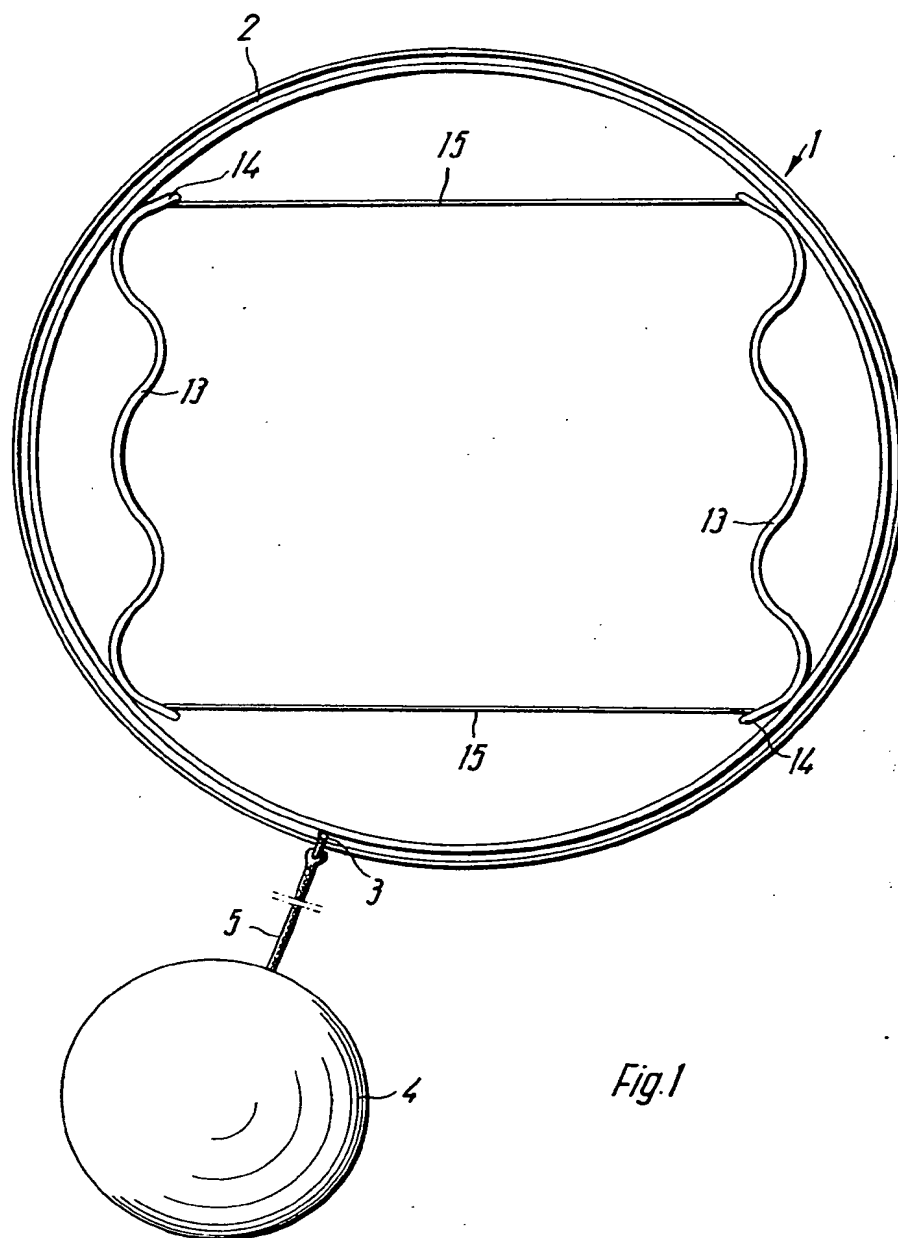


Fig. 1

1,390,477  
2 SHEETS

COMPLETE SPECIFICATION

This drawing is a reproduction of  
the Original on a reduced scale.  
SHEET 2.

BEST AVAILABLE COPY

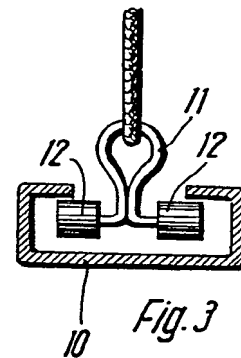
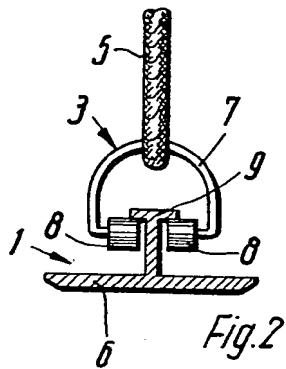


Fig. 4

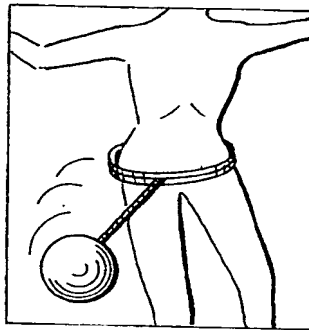


Fig. 5

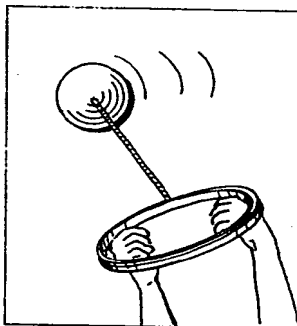


Fig. 6

